

Fact Sheet

Former Montrose Chemical Facility Henderson, Nevada

UPDATED AUGUST, 2005

Montrose Chemical Company of California formerly operated a chemical manufacturing plant located within what is now the Pioneer Americas LLC facility at the western end of the BMI facility near the City of Henderson, Clark County, NV. The Montrose plant ceased operations in 1983 and the main plant was demolished except for an HCL manufacturing unit that eventually was sold to Pioneer. Various closure activities, including the closure of former evaporation ponds, continued until 1989.

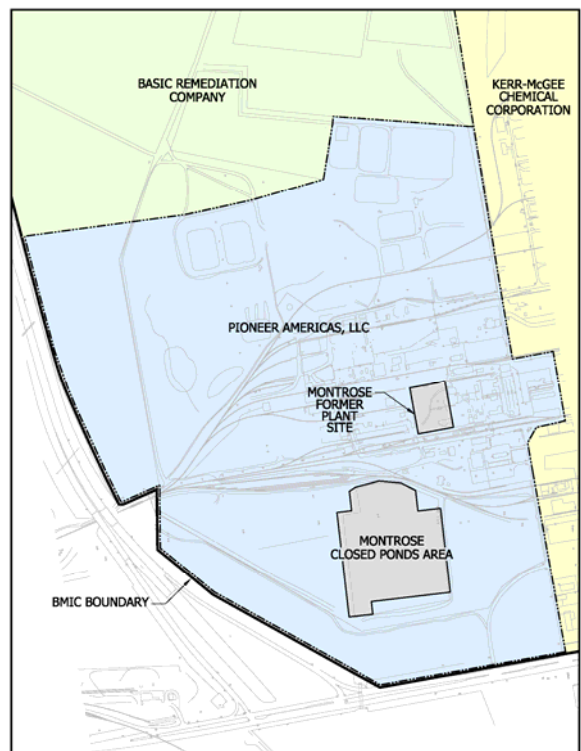
Administrative History

In 1991, Montrose entered into a Consent Agreement with the Nevada Division of Environmental Protection (NDEP) requiring Montrose to conduct a Phase I Environmental Conditions Assessment (ECA) of the former Montrose plant site to identify areas of potential environmental concern. Montrose submitted its ECA report to NDEP in 1993. In 1994, NDEP issued a Phase II Letter of Understanding (LOU) that outlined specific environmental issues to be investigated by Montrose. Subsequently, Montrose entered into another Consent Agreement with the NDEP in 1996 to conduct a Phase II Environmental Conditions Investigation (ECI) of areas of potential environmental concern at the former Montrose plant site as identified in the LOU.

Preliminary Site Investigations

Over the next five years, Montrose submitted a series of investigation reports and other correspondence to NDEP that preliminarily evaluated potential chemical impacts to soil and groundwater from the former plant operations. Of principal importance among these documents were the following reports:

- Draft Phase II Environmental Conditions Investigation Report - August 1997
Evaluated chemical presence in soils at areas of the former plant specified by the LOU
- Additional Groundwater Investigation Report - February 2000
Evaluated the presence of chemical migration in groundwater from the Montrose closed pond area



Montrose Former Plant Site Location

- Conceptual Site Model - Closed Montrose Ponds - February 2000
Integrated soil and groundwater chemical concentration data to form a partial picture of source area contribution and chemical migration in groundwater from the Montrose closed ponds
- Investigation of Deeper Water-Bearing Zones at the Closed Ponds and Former Plant Site March 2001
Began an evaluation of hydraulic characteristics and the presence of site-related chemicals in the second water-bearing zone beneath the former Montrose plant areas

For all reports, NDEP provided comments and Montrose responded with further information and discussion to clarify the findings of the investigation and to agree on further required work.

Recent Site Investigation

Subsequent to the completion of the preliminary field investigations outlined above, Montrose in coordination with NDEP has focused on further soil and groundwater characterization tasks believed necessary to complete a thorough investigation of the site. Data from these further investigations will allow evaluation of the need for possible remedial actions. The following tasks have been completed and reports are in the process of being developed in early 2005.

- An evaluation of chemical analysis methods has been conducted to assure that chemicals used in Montrose processes can be detected adequately to identify their presence in soil or groundwater.
- Because the preliminary investigation tasks focused primarily on chemicals expected to have the highest potential for impact to soil or groundwater, an evaluation has been completed to identify all possible chemicals that may be related to plant operations. Future investigation work will use this expanded list of analytes.
- Additional soils sampling at one portion of the former plant site and the installation of a monitor well into the third water-bearing zone below the plant have been conducted on an expedited basis to assist the planning of a follow-up round of soil and groundwater sampling.



Based on the results of these evaluations and the expedited site investigation work, workplans for additional soil and groundwater investigations are under development in mid-2005 for NDEP's review and approval. These investigations are focused on completing the Montrose site characterization to provide data for future risk assessment and remedial action evaluation. Additionally, once this work is complete, Montrose will be working with SMC and Pioneer to develop a comprehensive Conceptual Site Model, generate data quality objectives (DQOs), evaluate data gaps, and collect additional samples to resolve the data gaps. This document will combine information generated by both the Montrose and the SMC/Pioneer investigation work to provide a site-wide overview of source area contribution and groundwater contaminant transport to assess future evaluations of remedial alternatives.

Monitor Well
Drilling

Remedial Operations

While these additional investigations and evaluations are ongoing, Montrose is accelerating remediation of its former site by conducting an interim remedial action at a portion of the former plant site.

Soil vapor extraction is being applied to remove volatile organic chemicals from soils identified by the preliminary investigation programs. The program began in September 2004 and is expected to require a minimum of 18 months to complete.



Soil Vapor Extraction System

Finally, over the last year, Montrose, Pioneer, and SMC have been conducting, renovating, and upgrading a groundwater treatment system first installed downgradient of the Stauffer and Montrose facilities in 1983. The existing system uses air-stripping to remove volatile chemicals from groundwater downgradient of the former plant sites.



Groundwater Treatment System

The program has resulted in a series of improvements to the system's operating efficiency including increased pumping rates. Further engineering for the treatment portion of the facility is underway as of third quarter 2005 to add carbon adsorption to the treatment of the groundwater and to upgrade the existing air-stripper. This updated treatment system is planned to be in operation by the end of the third quarter 2005.

INFORMATION AND COMMUNITY INVOLVEMENT

NDEP oversees all aspects of the environmental work at the former Montrose site. Additional information can be obtained from Brian Rakvica (702-486-2870) or Jeff Johnson (775-687-9377) at NDEP. Montrose welcomes community input to this project and recognizes the need to respond to community concerns. Previous reports related to the environmental work at the site can be found at the City of Henderson Public Library and correspondence can be obtained from NDEP's offices in Las Vegas or Carson City.